Title of the Invention

Dispenser and Display Device

Field of the invention

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The present invention relates to a dispenser (also referred herein as a box), made of a single sheet of cardboard or other pliable material. This dispenser can be used for a variety of purposes, including the storage of stacked items such as individual pieces of paper. Aesthetically pleasing, this dispenser may also be used as a promotional or marketing tool.

Background of the Invention

10 Containers or boxes made from cardboard or other pliable materials are known in the art. Examples include the boxes described in the following patents which are suitable for storing a variety of things, such as cards and even laundry detergent: US Patent No. 5,476,218 ("Cardboard Box Having a Smooth Flat Bottom"), US Patent No. 5,439,168 ("Paper Box Having Strip-Shaped Inlet"), US Patent No. 4,019,673 ("Cardboard Box") and US Patent No.3,688,625 ("Cardboard Box and Method of Making Same").

Boxes made from a single cardboard piece are also known in the art. One example of a box of this type is US Patent No. 5,366,142 ("Cardboard Box Having Corner Seals").

Additionally, boxes that are suitable for holding and dispensing pieces or sheets of paper have been around for some time. Examples of such containers or dispensers include the following patents: US Patent No. 5,183,200 ("Folder Type Paper Box"), US Patent No.5,427,254 ("Holding Device for Self-Stick Note Pads"), US Patent No.5,161,712 ("No-Spring Pop-Up Note Dispenser") and US Patent No.6,119,851 ("Container for Notepads, Paper Clips, Staples and the Like").

Despite the variety of boxes available, boxes or containers that combine elements from all of the types of boxes mentioned above are not believed to be common. Boxes that combine the pliability of cardboard, that can be constructed from a single sheet, that can serve to dispense paper (or be used to store a limitless variety of items) and that can be personalized by decorating one or more sides or walls in an aesthetically pleasing manner do not abound. Advantageously, a box of this description would be produced inexpensively and would allow for individual creative modifications. A box of this type could also be used as a promotional or marketing tool.

The present invention relates to a novel box or container that seeks to meet all of these features and advantages.

Detailed Description of the Invention

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FIG. 1 shows a perspective view of the box (10) in accordance with a preferred embodiment of the present invention. This box (10) has a frustopyramidal shape with an opened top (12) and a closed bottom (14). The box (10) is characterized in that it comprises four interior walls (20,22,24,26) and four exterior walls (30,32,34,36). The exterior walls (30,32,34,36) are spaced apart from the interior walls (20,22,24,26) in order to create a space between them. At least one of the exterior walls (30,32,34,36) comprises an opening (40). FIG. 1 shows one of the openings (40) being oval. However, the opening or openings (40) can have any shape. An exterior wall (30,32,34,36) may comprise more than one opening (40) as well.

FIG. 2 shows a top plan view of the box (10) shown in FIG. 1 once unfolded. The doted lines in FIG. 2 correspond to the folding lines. As aforesaid, the material used for manufacturing the box (10) is preferably a single sheet of cardboard but any other pliable material can be used. Example of these other materials are paper, thin plastic sheets, thin metal sheets, etc.

One of the advantages of this box (10) is that it can be used to display illustrations or any other kind of markings on both its exterior walls (30,32,34,36) and its interior walls (20,22,24,26). The openings (40) on the exterior walls (30,32,34,36) allow to see the illustrations or markings on the exterior face of the corresponding interior walls (20,22,24,26). This provides an effect of "depth" that creates a very elegant and sophisticated display.

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FIG. 3 is a side view of the box (10). In a finish product, a person looking at this side of the box (10) would see the printed illustrations or markings on both the interior wall (26) and the exterior walls (36).

In the illustrated embodiment, one of the exterior walls (30,32,34,36), namely the 10 front exterior wall (30), and its corresponding interior wall (20) comprises a slot (42). This slot (42) is very useful when the box (10) is used to hold a stack of individual pieces of paper (16), as shown in FIG. 1. The slot (42) will allow the fingers of a person to easily retrieve a piece of paper (16) from inside the box (10).

Referred back to FIG. 2, the unfolded box (10) comprises a substantially crossshaped center portion (50) and four side portions (52,54,56,58). The cross-shaped center portion (50) comprises a middle section (60) that will become the bottom (14) of the box (10). The four adjacent sections, once folded, will become the exterior walls (30,32,34,36). At least one of the exterior walls (30,32,34,36), in this case three of the exterior walls (30,32,34,36), comprise an opening (40). FIG. 2 shows that the openings (40) are not limited to an oval shape, one of the openings (40) being shaped as a leaf. Any shape can be used, as required by the design. Yet, some designs may require that one or more openings (40) be covered by a transparent or translucent liner. This will not change the nature of the present invention since it would still allow someone to see illustrations or markings on the corresponding 25 interior walls (20,22,24,26). Similarly, one or more openings (40) may be provided with a hinged or otherwise removable opaque door that can be lifted to see the corresponding interior wall or walls (20,22,24,26).

The cross-shaped center portion (50) further comprises four pairs of flaps (62,64), one pair of flaps (62,64) being disposed at each corner of the cross-shaped center portion (50). These flaps (62,64) will provide a holding point for maintaining the box (10) in a folded position, as explained hereafter.

FIG. 2 also shows the slot (42). Half of this slot (42) is provided in the exterior wall (30) and the other continues into the adjacent side portion (52), more particularly into the section that will become the interior wall (20) once folded. This side portion (52) also comprises two opposite lateral sections (66,68) and a flap (70). The lateral sections (66,68) are preferably symmetrical with reference to the interior wall (20). Each of them comprises two slots (72,74) separated by an inclined edge (76). These slots (72,74) are designed to provide an interlocking engagement with slots (86,88) of corresponding side sections (80,82) of the opposite side portion (56), which side portion (56) appears at the bottom of FIG. 2 and also comprises a flap (84). Once folded, this will allow to hold the box (10) together without glue or mechanical fasteners. Nevertheless, one can omit this feature from a box (10) and use glue or mechanical fasteners to hold the folded box (10) together.

The two remaining side portions (54,58) of the unfolded box (10) comprises two elongated side flaps (90,92) located at the end of corresponding interior walls (22,26).

FIG. 4 is a cross-sectional view taken from line IV-IV in FIG. 1. This figure shows the configuration of two exterior walls (30,34) with reference to corresponding interior walls (20,24) of the preferred embodiment. It also shows the pieces of paper (16) inside the box (10).

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As can be appreciated, this box (10) provides many advantages for designers and those who will manufacture them. It can be used for a wide range of purposes and it is particularly useful for promotional material. Someone may also provide a top cover, if desired. Of course, the box (10) can be designed with a different shape than that illustrated in the appended figures. For example, the interior receptacle of the

box (10) can be rectangular instead of being a square. The angle between the interior walls (20,22,24,26) and the exterior walls (30,32,34,36) can also be different and not necessarily the same for all sides of the box (10). The top of the box (10) can be provided with a wide horizontal edge. The unfolded single sheet from which the box (10) is made may be itself composed of two or more smaller pieces glued or otherwise attached together before being folded.

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